
ENVIRONMENTAL Fact Sheet



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Frequently Asked Questions about Dam Removal

While each potential dam removal has its own unique set of characteristics, there are several questions that tend to arise at virtually every project. This fact sheet provides answers to some of the most common questions about river restoration and dam removal. Questions are not in order of importance.

"What will the restored river look like?"

Generally the easiest way to predict how a river would look if a dam were removed is to look at the river upstream of the impoundment and downstream of the dam. Unless there is a significant geologic feature (e.g., a waterfall) in the impounded stretch of the river, it is unlikely that the restored river will be significantly different than what is seen in free-flowing parts of the river. Bear in mind that some dams are built to artificially raise the water level of a natural lake or pond. If that is the case, the extent of the pond post-dam removal can be predicted through modeling and/or sounding surveys.

"What will the newly exposed pond bottom look like?"

Land will be exposed when an impoundment is drawn down during dam removal. The amount of land that will be exposed depends upon the site conditions. If nearby sections of the free-flowing river have rocky banks, chances are that the restored section will too. If nearby sections of the river are vegetated, chances are that newly exposed lands will re-vegetate within a matter of weeks during growing seasons, thanks to the many seeds that have accumulated in the sediment over the years. Depending on the time of year and make-up of the sediment that is exposed, there may be an odor of decomposition for a short period of time (typically ranging from a few days to a few weeks). However, once this "new" land is exposed to sunlight and oxygen, plants grow very quickly, drying up the water-logged sediment in the process. Of course, if the exposed land is subject to tidal action or other significant water level fluctuations, this area may not revegetate as much or as quickly.

"Will there be an increase in flooding?"

This would only be a concern if the dam actually provides flood control. In fact, only about 2 percent of New Hampshire's dams, or 70 dams, provide flood control. Flood control dams are fairly easy to recognize because they tend to have fluctuating water levels, and relatively low water levels except during flood events. It is important to note that dams can actually increase the risk of flooding both downstream and upstream of the dam, due to dam disrepair and/or misoperation.

"How will property values be affected?"

This is a difficult question to answer because it is very much dependent on the particular site and is strongly influenced by other issues, for example, the real estate market, location in state, characteristics of the property. Studies have not shown strong correlations between dam removal and changes in property values. For instance, if a dam removal restores sport fishing, property values may increase. If, on the other hand, a dam is removed that creates a pond unique to the area, property values may decline. As shown at sites across the country, the removal of a particular dam will be seen as a good thing to some potential buyers and a bad thing to others. One person's lost pond is another person's restored river.

"Who will own the exposed land?"

Land ownership questions can typically be answered by referring to the deeds for the specific dam property and the adjacent properties. The dam's deed might include all of the land that was flowed and the exposed land would revert to the dam owner. Some dam owners have donated these lands to land trusts or quit-claim deeded them to adjacent the land owners or municipalities. In other cases, the land currently underwater may be publicly owned, or it may simply revert to the property owners bordering the restored river. Deeds can be researched at that county's Registry of Deeds. Some New Hampshire counties now have information available on-line. See the N.H. Counties Registry of Deeds web site for more information.

"Doesn't the dam have historical value?"

New Hampshire takes great pride in its rich history, and part of the dam removal planning process is to assess the project's potential to impact historical resources. In accordance with the National Historic Preservation Act, the State Historic Preservation Office must be consulted about the project as early as possible in the project planning process. They may recommend further study to determine the historic value of the site, based on both archaeological and architectural criteria. At some project sites the dam's historic contributions are honored with interpretive signs, recovered mill stones and other information. In other cases, when a dam is historically significant, dam removal may not be appropriate and other alternatives may need to be considered.

"Who will pay for the dam's removal?"

This varies with the site, the potential for ecological restoration, and the financial ability of the dam owner. DES's River Restoration Coordinator at (603) 271-3406 may be able to help identify public and private funding sources to offset the costs of the project.

"How will fishing opportunities change if the dam is removed?"

Dam removal improves the health of the river and aquatic habitat, typically to such an extent that anglers can look forward to increased numbers of fish and more places to fish for them. In some cases, removing a dam will change the type of fishery. For instance, a warmwater fishery may be restored to a cool or coldwater fishery. In many cases, free-flowing rivers allow a wider variety of warm, cool and coldwater species to seasonally occupy portions of the same river, providing greater fishing variety. Anglers often like to fish right below dams, and some may oppose removal because they feel they'll lose a good fishing spot. But it's important to realize that the fish aren't necessarily there because it's good habitat, they're often there because they're prevented from moving further upstream.

"How will the dam's removal affect fish and wildlife habitats in the area?"

Dams alter the natural physical, biological and chemical functions of rivers. And, since healthy rivers are considered the lifeblood of healthy habitats, dams can result in unsustainable and degraded conditions for a variety of aquatic and terrestrial species. The habitats that have been created solely because of the dam's presence will change if the dam is removed. For instance, a deep water marsh may be restored to a shallow marsh or a wet meadow. The N.H. Fish and Game Department and other natural resources agencies can help provide site-specific information and predicted changes.

For more information about dam removal in New Hampshire, contact: DES River Restoration Coordinator, (603) 271-3406 <http://www.des.nh.gov/dam/damremoval>